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(54) Title: POLYOL AND COMPLEX ESTERS FOR USE WITH, IN PARTICULAR, FLUORINATED REFRIGERANTS

(57) Abstract

The invention concerns a refrigerant composition which comprises a chlorine-free hydrofluorocarbon based refrigerant and, mixed with the refrigerant, a lubricant comprising a polyol ester. According to the invention the polyol ester comprises an ester of 3-hydroxy-2,2-dimethylpropyl-3-hydroxy-2,2-dimethylpropionate, the carboxylic acid residue of which is derived from a linear or branched $C_4...C_{18}$ -carboxylic acid or an anhydride thereof, or it is derived from a mixture of linear or branched $C_4...C_{18}$ -carboxylic acids or anhydrides thereof. The present invention also concerns novel complex ester of 3-hydroxy-2,2-dimethylpropyl-3-hydroxy-2,2-dimethylpropionate, which contain residues of mono- or bivalent carboxylic acids. The novel esters exhibit good solubility in fluorinated hydrocarbons and excellent lubricating properties.